

This listing of claims will replace all prior versions, and listings, of claims in the present application.

LISTING OF CLAIMS:

Claim 1 (Previously presented) A process for producing an insensitive explosive mixture comprising depositing sonochemically aminated 1,3,5-triamino-2,4,6-trinitrobenzene (TATB) in an amount of less than 15 % by weight onto secondary explosive crystals to form a coating of said TATB on said secondary explosive crystals which binds said secondary explosive crystals.

Claim 2 (Cancelled)

Claim 3 (Original) The process of Claim 1 wherein the secondary explosive crystals are selected from the group consisting of cyclotrimethylenetrinitramine (RDX), cyclotetramethylenetetranitramine (HMX), CL-20 (2,4,6,8,10,12-hexanitrohexaazaisowurzitane, HNIW), PETN (pentaerythritoltetranitrate) and combinations thereof.

Claim 4 (Original) The process of Claim 3 wherein the secondary explosive crystals are HMX crystals.

Claim 5 (Original) The process of Claim 1 wherein the secondary explosive crystals are in an ammonia solution.

Claim 6 (Original) The process of Claim 1 wherein the sonochemically aminated TATB is synthesized from 1,3,5-trichloro-2,4,6-trinitrobenzene (TCTNB) by amination with NH_4OH under the influence of ultrasonic irradiation.

Claim 7 (Original) The process of Claim 1 wherein the sonochemically aminated TATB is produced by dropping a solution of trichlorotrianitrobenzene (TCTNB) in toluene into an ammonia solution that is immiscible with the solution of TCTNB in toluene and reacting the same in the presence of an ultrasonic source.

Claim 8 (Withdrawn) The process of Claim 1 wherein the sonochemically animated TATB is produced in-situ during said depositing step.

Claim 9 (Withdrawn) The process of Claim 1 wherein said in-situ production comprises providing a suspension of said explosive crystals in an aqueous ammonia solution and adding a solution of 1,3,5-trichloro-2,4,6-trinitrobenzene in toluene dropwise.

Claim 10 (Previously Presented) The process of Claim 1 further comprising adding an additional binder to said depositing step.

Claim 11 (Previously Presented) The process of Claim 10 wherein the additional binder comprises a polyacrylic elastomer, a phthalate, calcium stearate, or fumed silica.

Claim 12 (New) The process of Claim 1 wherein said sonochemically aminated TATB has a mean particle diameter of 6 to 8 μm .

Claim 13 (New) The process of Claim 1 wherein said sonochemical aminated TATB has a mean particle diameter of less than 1 μm .